



Supreme Court of the United States

OCTOBER TERM, 1942

NO.

THE CONSOLIDATED EXPANDED METAL
COMPANIES, Petitioner,

v.

UNITED STATES GYPSUM COMPANY,
Respondent.

BRIEF IN SUPPORT OF PETITION FOR WRIT OF CERTIORARI

I.

The Opinions of the Courts Below.

The opinion of the Court of Appeals is reported at 130 F. 2d 888, and appears at p. 2989 of the printed record. The opinion of the District Court is reported at 44 USPQ 673 and appears at p. 2924 of the record. The report of the Special Master appears at p. 2809.

II.

Jurisdiction.

(1) Jurisdiction is invoked under Section 240(a) of the Judicial Code; 28 U. S. C. Section 347. This is a suit in equity arising under the patent laws of the United States. Judgment was entered by the Circuit Court of Appeals on October 6, 1942. The judgment is final in that it requires that the complaint be dismissed.

(2) Decisions believed to sustain the jurisdiction are as follows:

Schriber-Schroth Co. v. Cleveland Trust Co. et al., 311 U. S. 211, 217;

Mackay Radio & Telegraph Co. v. Radio Corp. of America, 306 U. S. 86, 89;

Schriber-Schroth Co. v. Cleveland Trust Co. et al., 305 U. S. 47, 50;

Paramount Public Corp. v. American Tri-Ergon Corp., 294 U. S. 464;

Altoona Public Theatres, Inc. v. American Tri-Ergon Corp., 294 U. S. 477;

DeForest Radio Co. v. General Electric Co., 283 U. S. 664, 669;

Webster Electric Co. v. Splitdorf Electrical Co., 264 U. S. 463, 469.

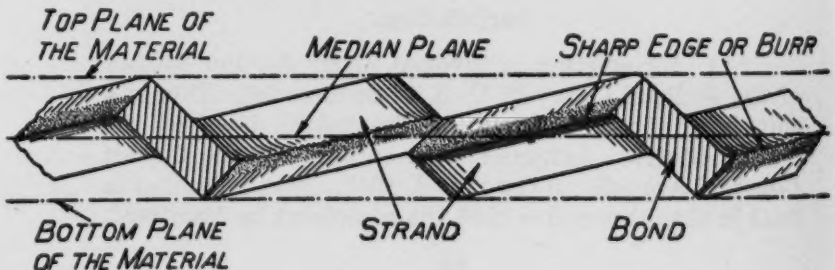
III.

Statement of the Case.

In addition to the facts stated in the foregoing petition, the following is submitted:

THE CROSS INVENTION.

The burrs and sharp edges are inside of the diamonds which make up the mesh-work. This is shown by the cuts bound at the back of this volume. In addition, we here insert an illustrative sketch.



As shown in the illustration, the bonds and strands are both tilted with respect to the bounding planes of the sheet, considered as a whole. Due to this peculiarity of expanded metal, the burrs and sharp edges do not lie on the surface planes, but wholly between these bounding planes. The hand may be laid flat on the surface of the sheet and rubbed over it with impunity, but *within* the diamonds there are razor-sharp edges. These edges extend up into the "crotches" of the diamonds and lap over one another, as will be seen from the first half-tone illustration bound at the back of this volume. Consequently, the problem is wholly different from that of merely cleaning the bounding surface plane of an imperforate metal body, such as a solid sheet. The attempts of respondent's predecessor to remove these edges by using wire brushes failed, "principally due to the peculiarity of the material itself and the shape of the mesh"¹.

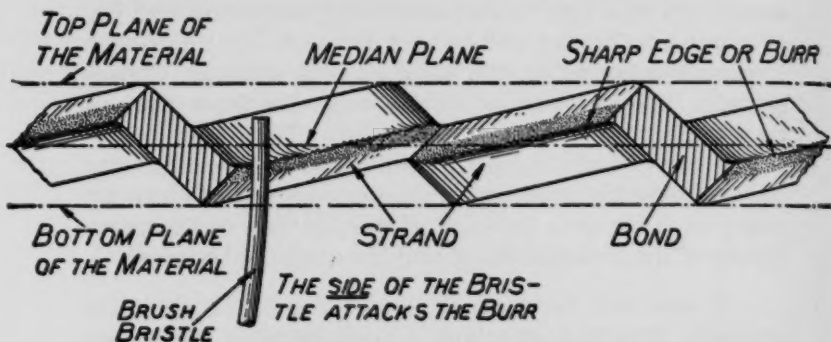
It was not for lack of a suitable brush that the problem remained unsolved. Such brushes were just about as old as the problem, being shown in Wooster patent 82,780 of October 6, 1868². And as early as 1891 brushes of this sort had been organized into a machine for cleaning the surfaces of imperforate sheet metal plates³. Cross used these brushes (a) on a *material*—expanded metal—never before so treated; (b) *in a new way*, so that the brush bristles *functioned* differently from the way they had theretofore functioned and thereby (c) produced a *new result*; namely, a safe expanded metal which satisfied the forty-year-old want.

¹ Rec. p. 1973.

² Rec. p. 2393.

³ Buckman patents 451,263, Rec. p. 2401, and 451,264, Rec. p. 2409. Respondent's expert conceded, Rec. p. 541, that no closer approach to the Cross invention could be found in the prior art than the disclosures of the Buckman patents, and the Court of Appeals was apparently of the same view; Rec. p. 2992.

Cross' new mode of using the wire brushes consists in utilizing their "side" action instead of the "tip" action of the prior art. The side action of the brushes is well illustrated in Figure 3 of the patent and is described in detail in the specification, page 3, line 70 et seq. We here insert an illustration which corresponds to Figure 3 of the patent but which shows only a single brush bristle.



The bristle shown in the foregoing illustration must be imagined to be moving away from the eye of the reader. It will be noted that the bristle projects into the open diamond, its tip extending beyond the median plane of the sheet of mesh to be treated. As the bristle moves forward its side engages the jagged or razor-sharp edge of the strand and slides across that edge. By reason of the high speed at which the bristle is moving, there is a process of attrition resulting in the removal of metal from that edge, and innumerable repetitions of this action effect a rounding which makes the strand edge safe.

The work is done by the *sides* of the bristles—the *tips* do not function at all; whereas in the surface cleaning of imperforate sheets by bristled brushes, the *tips* alone function and the *sides* play no part. This side action requires that the brushes and the expanded metal

fabric be relatively so located that the brush bristles extend to or beyond the median plane of the fabric. And the brushing must be lengthwise of the diamonds. The patent describes and claims both these matters.

THE INVENTION SATISFIED AN OLD AND RECOGNIZED WANT.

The invention gave the public, for the first time in the expanded metal art, a *safe* product, which fully satisfied the want that had been recognized but had gone unsatisfied for more than *forty years*, despite all efforts of the skilled workers in the art to solve the problem. Injuries due to cutting the hands have been entirely eliminated¹ and new uses for the material have been opened up². The material has completely displaced the old unsafe product of comparable size in the market³ and an impressive record of commercial success has been built up⁴.

RESPONDENT'S FAILURE TO SOLVE THE PROBLEM.

It has been shown in the petition that respondent's predecessor failed to solve the problem, and characterized it as "impossible" of solution. Respondent's own record, prior to its appropriation of the Cross invention, is also one of futility. Respondent's superintendent, Gibson, after conceding that the sharp edges were "Very much of a hazard"⁵, told of a workman in the plant who had a finger sliced off by the sharp edges of the expanded metal forming a partition. This was in 1928, when Cross completed his invention, but respondent knew nothing

¹ Rec. pp. 217-8, 252, 419, 423, 444.

² Rec. pp. 251, 291, 433, 445.

³ Rec. p. 189.

⁴ Rec. pp. 188-189, 2065.

⁵ Rec. p. 727.

better than to cover the metal with boards, Gibson admitting:

"Q. That was your solution of the problem in 1928?

A. That is correct."⁶

RESPONDENT'S COPYING WAS INDUCED BY PETITIONER'S SUCCESS.

After petitioner's material came on the market in the middle of 1931, the trade insisted upon having its metal "thoroughly brushed * * * free from burrs" and "the absolute equal" of petitioner's product¹. In the latter part of 1931, at the insistence of its sales manager, respondent had begun to try to debur its expanded metal, first by a tumbling process which was abandoned². Late in 1931 or early in 1932 respondent procured a number of sheets of petitioner's brushed expanded metal.³ It then located the source from which petitioner was securing its brushes⁴ and sought "information relative to the removal of a very sharp burr from our expanded metal by means of a wire brushing machine * * * as soon as possible"⁵. It will be borne in mind that this was prior to the issuance of the patent in suit. So aided, respondent built its admittedly infringing machine.

THE PRIOR ART.

Respondent concedes that the Buckman patents are the most pertinent prior art references¹. The Court of Appeals concedes that "a precise anticipation of the

⁶ Rec. p. 727.

¹ Rec. pp. 2002-2004.

² Rec. p. 376.

³ Rec. pp. 262-3.

⁴ Rec. pp. 383-384.

⁵ Rec. pp. 2005-2006.

¹ Rec. p. 2992.

Cross apparatus does not appear" and further that "some adaptation would have been required" to make the Buckman machine function like the Cross machine, but held that "the advance made by Cross must be construed as within the skill of the art rather than invention, * * *"². The Buckman patents came into the art in 1891 but, despite the "insistent demand", it was not until 37 years later—in 1928—that the problem was solved. And no one saw in the Buckman patents any relation to the problem until their resurrection for the defense of this suit.

The Buckman machines teach no more than the application of scouring powder to the surfaces of solid (imperforate) plate metal for the removal of "loose scales or other impurities clinging thereto", "just like a housewife polishing her silver plate with a brush and a little cleaning powder"³. There is no thought of removal of burrs and sharp edges within the diamonds of expanded metal, and the mode of action for this latter operation, namely, side action of the bristles, is nowhere suggested.

As further showing that "the advance made by Cross must be construed as within the skill of the art, rather than invention", the Court of Appeals referred to two machines of the American Brass Company⁴. These machines were also used for the surface cleaning of imperforate slabs. Although available to the art for sixteen years or more prior to the Cross development, no one had ever seen in them any way of removing burrs and sharp edges from expanded metal. They were used for that purpose by dint of adjustments and a mode of operation employed only once in their history. And that

² Rec. p. 2994.

³ Rec. p. 542.

⁴ Rec. p. 2994.

occasion was *twenty-five years after the machines had first been put into use and solely for the purposes of this case*. The designer of the machine, asked why a procedure so different from the normal operation of the machine had been employed on the test, replied "I do not know; I was directed to do so"⁵. The District Judge properly said "Knowledge of the Cross machine and his method were implicit in what was done there"⁶.

THE EXPERIMENTS OF THE MANUFACTURERS BRUSH COMPANY.

Cross, the patentee, whose experience in the expanded metal art began in England prior to 1913¹, became superintendent of petitioner's plant in 1925. Petitioner had "had lots of complaints"² about the sharp edges and burrs on expanded metal, and Cross attacked the problem of removing them. He first tried pickling, but without success. He experimented with the knives on the machines for making the expanded metal. Then he suggested that the sharp edges could be removed by brushing³. The Manufacturers Brush Company was a maker of metal brushes and Cross instructed petitioner's purchasing agent to send specimens to it for brushing. A covering letter dated February 19, 1926 was sent saying "What we are interested in knowing is whether the sharp edges can be removed with the wire brush * * *"⁴. The Brush Company reported a few weeks later that the "sharp edges can be removed" and that the samples were being returned "thoroughly

⁵ Rec. p. 937.

⁶ Rec. p. 2926.

¹ Rec. p. 1717.

² Rec. p. 1718.

³ Rec. p. 1719.

⁴ Rec. p. 2121.

cleaned"⁵. There was no disclosure at any time by the Brush Company to Cross as to any of the details of the brushing and respondent adduced no proof whatever as to the manner in which the samples were treated by The Manufacturers Brush Company, although, as pointed out by the District Judge⁶, the trial was held in Cleveland where The Manufacturers Brush Company was located.

The only testimony as to the success of the attempts of The Manufacturers Brush Company to remove the sharp edges is that of Cross himself, who said that the samples were not satisfactory⁷. Further questioning by the Master elicited the statement⁸ that the sharp edges and burrs were not removed from the strands "all over the sheet, or in the corners of the sheet, in the V's".

It was not until after further extensive work and experimentation, extending into the year 1928, that Cross worked out the factors of (a) setting the brushes in such relation to the work as to obtain a side action of the bristles and (b) brushing lengthwise of the diamonds⁹.

⁵ Rec. p. 2123.

⁶ Rec. p. 2926.

⁷ Rec. p. 1720.

⁸ Rec. p. 1790.

⁹ Rec. pp. 1731-1732.

IV.**Specification of Errors.**

If the writ is granted, the following errors will be urged:

1. The Court of Appeals erred in finding and holding that the Cross patent is invalid and in directing that the complaint be dismissed.

2. The Court of Appeals erred in finding and holding the patent void for lack of invention over the prior art.

3. The Court of Appeals erred in failing to hold that invention, rather than the exercise of mechanical skill, on the part of Cross, was to be inferred from the fact that the Cross method and device satisfied an old and recognized want.

4. The Court of Appeals erred in finding and holding that claim 16 of the Cross patent does not differentiate patentably from claim 15.

5. The Court of Appeals erred in finding and holding that claim 16 of the patent in suit is not patentable because of the acts of The Manufacturers Brush Company.

6. The Court of Appeals erred in failing to hold that the acts of The Manufacturers Brush Company, done at Cross' behest, inured to his benefit.

7. The Court of Appeals erred in reversing the judgment of the District Court and directing the dismissal of the Bill.

V.

Summary of Argument.

A. The Court of Appeals misunderstood and misapplied the decisions of this Court in the *Schriber-Schroth* cases. The Court of Appeals erroneously concluded that the decisions of this Court in the *Schriber-Schroth* cases nullified prior controlling decisions of this Court stating an affirmative rule of invention. In point of fact, the *Schriber-Schroth* decisions had no such effect but were based on the purely technical questions of (a) alteration and enlargement of original disclosure and (b) file-wrapper estoppel.

B. The decision of the Court of Appeals is contrary to the controlling decisions of this Court.

C. The decision of the Court of Appeals is in conflict with the decisions in other Circuits on the same points of law.

D. The questions involved are of such public importance as to call for the issuance of the writ.

VI.

ARGUMENT.

Point A. The Court of Appeals misunderstood and misapplied the decisions of this Court in the *Schriber-Schroth* cases.

Petitioner urged upon the Court of Appeals the applicability to the facts at bar of the doctrine of *Paramount Publix Corp. v. American Tri-Ergon Corp.*, 294 U. S. 464, 474. Although not adverting to the *Paramount* case by name, the Court of Appeals considered the argument¹ and rejected it, primarily because of the decisions of this Court in the *Schriber-Schroth* cases², saying that "older cases are not very helpful", that "the patent law is presently in a state of flux", and that the decisions in the *Schriber-Schroth* cases have made it "forcibly clear" that "commercial success or the apparent solution of a long perceived problem will not of itself vitalize an otherwise invalid patent".

The first *Schriber-Schroth* decision by this Court (305 U. S. 47) turned purely on a question of alteration and enlargement of original disclosure. Nowhere did this Court say that an invention had not been made but merely that the thing which the Court of Appeals had stated to be the invention was not disclosed in the Gulick and Maynard applications. Indeed, in the second *Schriber-Schroth* decision, 311 U. S. 211, 214, this Court said that "for that reason *alone* we held that * * * both patents failed to satisfy the requirements of the statute * * *".

¹ Rec. p. 2997.

² Rec. p. 2994, p. 2998.

An indication of the complete misinterpretation of this Court's opinions in the *Schriber-Schroth* cases is found in the comment of the Court of Appeals that the evidence in the *Schriber-Schroth* cases "of a long felt need and commercial acceptance of a solution was fully as dramatic as that here presented, if, indeed, not more so"³. Long felt need and commercial acceptance of a solution are factors which obviously could have no influence on the questions which were decisive of the *Schriber-Schroth* cases.

We assume this Court deemed that its first *Schriber-Schroth* decision was misinterpreted by the Court of Appeals, for this Court's second decision states that certiorari was granted for the second time on a petition which raised the question "whether the Court of Appeals had misinterpreted or unduly limited this Court's earlier decision in this case * * *". It seems plain from the decision in the case at bar that the Court of Appeals has continued to misinterpret the first *Schriber-Schroth* decision and has misinterpreted the second one as well. On the authority of the second *Schriber-Schroth* case and *Webster Electric Co. v. Splitdorf Electrical Co.*, 264 U. S. 463, 469, it is submitted that the writ of certiorari should issue to correct the error.

Point B. The decision of the Court of Appeals is contrary to the controlling decisions of this Court.

(a) This Court said in *Paramount Publix Corp. v. American Tri-Ergon Corp.*, 294 U. S. 464, 474:

"Where the method or device satisfies an old and recognized want, invention is to be inferred, rather than the exercise of mechanical skill. For mere skill of the art would normally have been called into action by the generally known want."

³ Rec. p. 2998.

In support of this proposition, the *Paramount* case cites a long line of earlier decisions of this Court, including, interestingly enough, *Expanded Metal Co. v. Bradford*, 214 U. S. 366, 381, which holds:

"It may be safely said that if those skilled in the mechanical arts are working in a given field and have failed after repeated efforts to discover a certain new and useful improvement, that he who first makes the discovery has done more than make the obvious improvement which would suggest itself to a mechanic skilled in the art, and is entitled to protection as an inventor".

The Golding invention, there upheld, was made "about ten years" after the patentee, with one Durkee, had introduced the earlier method of manufacture. The earlier method functioned well enough for expanded metal to become "extensively used and recognized as a new commercial article"⁴. In the case at bar the problem remained unsolved for *over forty years*, and prior to Cross' invention its solution was characterized as "impossible".

The decision of the Court of Appeals is not based upon the opinion of any witness that what Cross did was "within the expected skill of the art". That is the mere inference which the court drew. In view of the doctrine of the *Paramount* case, and the earlier decisions of this Court therein quoted, we submit that the inference may not be legitimately drawn. In essence, the decision of the Court of Appeals says that the men in the art *should* have seen the solution to their problem and the fact that they did not see it is of no moment. Such an inference may legitimately be drawn where the solution to a problem follows quickly on its presenta-

⁴ 214 U. S. 366, pp. 367-368.

tion, but not, under the decisions of this Court, in circumstances like those at bar.

(b) This Court said in *Krementz v. The S. Cottle Company*, 148 U. S. 556, 560:

"The view of the court below, that Krementz's step in the art was one obvious to any skilled mechanic, is negated by the conduct of Cottle, the president of the defendant company. He was himself a patentee under letters granted April 16, 1878, for an improvement in the construction of collar and sleeve buttons, and put in evidence in this case. In his specification he speaks of the disadvantages of what he calls 'the common practice to make the head, back and post of collar and sleeve buttons separate, and to unite them by solder'. His improvement was to form a button of two pieces, the post and base forming one piece, and then soldering to the post the head of the button as the other piece. *Yet, skilled as he was, and with his attention specially turned to the subject, he failed to see, what Krementz afterwards saw, that a button might be made of one continuous sheet of metal, wholly dispensing with solder, of an improved shape, of increased strength, and requiring less material.*"

The District Judge applied the logic of this decision to the facts at bar as "added support"⁵ for his conclusion that the patent exhibited invention, saying that respondent's adoption of the invention "speaks with undeniable force". The Court of Appeals, at the outset of its opinion⁶, took vigorous exception to this statement, characterized it as "illogical", and indicated that its own contrary view was "elementary". There is no factual difference which renders the *Krementz* case in-

⁵ Rec. p. 2926.

⁶ Rec. pp. 2989-2990.

applicable to the facts of the case at bar. To the contrary, the reasoning is even more applicable here because respondent not only failed to solve the problem⁷, but the President of its predecessor characterized its solution as *impossible*.

(c) This Court said in *Hobbs v. Beach*, 180 U. S. 383, 392:

"With all the anticipating devices before us, it is apparent that the mere change in the shape of the dies was a minor part of the work involved in so changing the Dennis and York machine as to make it perform a wholly different function, the invention consisting rather in the idea that such change could be made, than in making the necessary mechanical alterations. As stated by Judge Coxe in his opinion in *Beach v. American Box-Machine Co.*, 63 Fed. Rep. 597, 'the question is whether a mechanic before any one had thought of pasting stay strips to the corners of boxes by machinery, would construct the Beach machine after seeing the labeling machine. Would the latter suggest the idea and the embodiment of the idea? Would the thought enter the mind of the skilled mechanic with the Dennis and York device before him on his work bench; and if it did, would it not be a creative thought whose presence would convert the mechanic into an inventor?'"

In the case at bar, the Court of Appeals conceded that "some adaptation would have been required" in the prior art machines to make them effective to remove burrs and sharp edges from expanded metal, but held that there could be no invention unless those adaptations themselves involved invention⁸, whereas this Court

⁷ Ante pp. 19-20.

⁸ Rec. pp. 2992-2993.

expressly held in *Hobbs v. Beach* (p. 391) that Beach's changes in the Dennis and York machine did not, in themselves, require invention. The *function* of the Dennis and York machine was to cut off the gummed paper slip carrying a postal address and automatically affix it to a newspaper, envelope or the like, while the function of the Beach machine was to cut off a gummed paper slip and automatically affix it to a cardboard box for the purpose of holding the corners together. In the case at bar the function of the Buckman machine—concededly the closest reference—is to apply scouring powder to the surface of solid sheets of plate metal for the purpose of removing “loose scales or other impurities clinging thereto”, “just like a housewife polishing her silver plate with a brush and a little cleaning powder”⁹. There is no disclosure of the removal of shear fins, burrs or slivers⁹. It is plain, therefore, that the difference in function between the Cross patent and the Buckman patent is considerably greater than the difference in function between the Beach machine and the Dennis and York machine.

(d) This Court said in *Agawam Company v. Jordan*, 7 Wall. 583, 602:

“No one is entitled to a patent for that which he did not invent unless he can show a legal title to the same from the inventor or by operation of law; but where a person has discovered an improved principle in a machine, manufacture, or composition of matter, and employs other persons to assist him in carrying out that principle, and they, in the course of experiments arising from that employment, make valuable discoveries ancillary to the plan and preconceived design of the employer, such suggested improvements are in general to be re-

⁹ Rec. p. 542.

garded as the property of the party who discovered the original improved principle, and may be embodied in his patent as a part of his invention."

The principle was reiterated in *Minerals Separation, Limited v. Hyde*, 242 U. S. 261, 270.

In the present case Cross initiated whatever was done by The Manufacturers Brush Company by sending specimens to it with a directive to ascertain "whether the sharp edges can be removed with the wire brush". It is evident that if Cross had not done this, The Manufacturers Brush Company would not have run the test. The report of the Brush Company to Cross was in the affirmative, albeit the only evidence as to the success of the Brush Company is that it had failed to remove all of the burrs and sharp edges or to remove them from the V's of the diamonds¹⁰. It is plain, therefore, that the Brush Company did not do more than Cross directed it to do but failed to do all that he wanted done. Cross had to carry on further extensive work before he achieved success.

We quote further from the *Agawam* case as follows:

"Suggestions from another, made during the progress of such experiments, in order that they may be sufficient to defeat a patent subsequently issued, must have embraced the plan of the improvement, and must have furnished such information to the person to whom the communication was made that it would have enabled an ordinary mechanic, without the exercise of any ingenuity and special skill on his part, to construct and put the improvement in successful operation."

It is plain that the reports of The Manufacturers Brush Company do not fall within the purview of the language

¹⁰ Ante p. 23.

just quoted, as is shown by the fact that long-continued work on the part of Cross was required before he achieved success.

We submit that in each of the particulars above discussed the Court of Appeals has so departed from and shown such disregard of controlling decisions of this Court that the writ of certiorari should issue to correct the error.

Point C. The decision of the Court of Appeals is in conflict with the decisions in other circuits on the same points of law.

In the foregoing petition, under the statement of reasons relied upon for the allowance of the writ, decisions of other Circuit Courts of Appeals have been cited to show conflict of the opinion of the Court of Appeals in the case at bar with the decisions of those other Courts of Appeals. Since in each instance the conflict is in respect of a point wherein the Court of Appeals in the case at bar is likewise in conflict with controlling decisions of this Court, as set forth immediately above, it is not deemed necessary to enlarge upon the proposition here. It is submitted that the writ of certiorari should issue to resolve the conflicts.

Point D. The questions involved are of such public importance as to call for the issuance of the writ of certiorari.

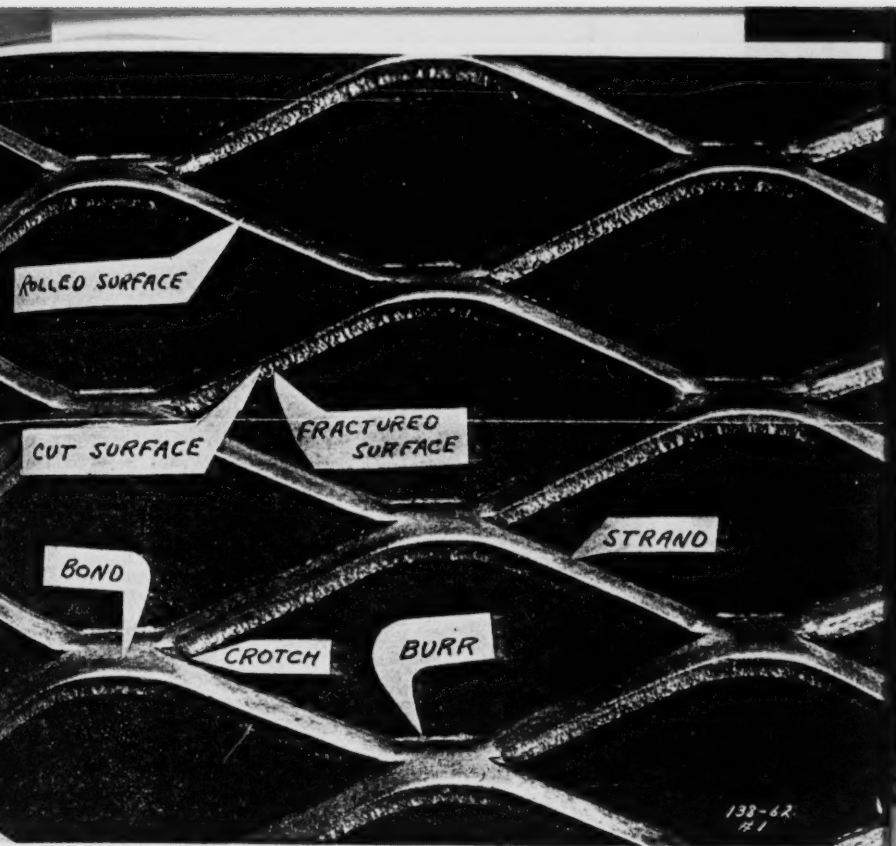
The public importance of the primary question here involved has been fully developed in the petition and requires no further discussion here.

Conclusion.

For the foregoing reasons, it is respectfully submitted that the petition should be allowed and the judgment of the Circuit Court of Appeals for the Sixth Circuit reviewed and reversed.

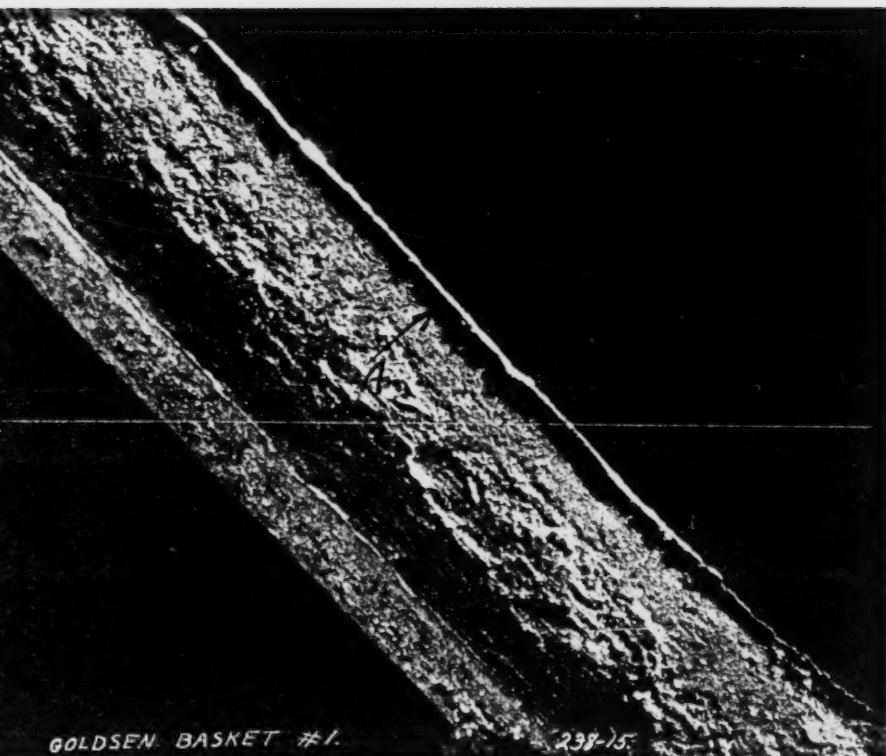
Respectfully submitted,

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ARTHUR J. HUDSON,
Counsel for Petitioner.



REPRODUCTION OF EXHIBIT 132 (Rec. p. 2097)
ILLUSTRATING EXPANDED METAL.





GOLDSSEN BASKET #1.

238-15

REPRODUCTION OF EXHIBIT 142 (Rec. p. 2099)
ILLUSTRATING A CHARACTERISTIC BURR "A".